



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,142	11/29/2000	Kevin A. McCullough	P00372-US1	6552

3017 7590 07/29/2003

BARLOW, JOSEPHS & HOLMES, LTD.  
101 DYER STREET  
5TH FLOOR  
PROVIDENCE, RI 02903

EXAMINER
----------

LEE, EDMUND H

ART UNIT	PAPER NUMBER
----------	--------------

1732

10

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/726,142

Applicant(s)

MCCULLOUGH ET AL.

Examiner

EDMUND H LEE

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 May 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP407106784A in view of Eriksson (USPN 6200630). In regard to claim 9, JP407106784A teaches the basic claimed process including a method of forming a thermally conductive part (abstract; fig 1); providing a base thermoplastic polymer matrix (abstract; fig 1); mixing a thermally conductive filler material into the base thermoplastic polymer matrix to form a thermally conductive composite material (abstract; fig 1); injection molding a part from the thermally conductive composite material into a net shape molded configuration wherein the part includes an outer surface and a contact interface for flush thermal communication with a heat generating object (abstract; fig 1)--as a note, the enclosure of JP407106784A has a surface that can be in contact with a heat generating object; and attaching a metallic plate to the part in order to shield against EM radiation (abstract; fig 1). As a note, the enclosure of JP407106784A inherently dissipates heat away from a heat generating object. However, JP407106784A does not teach plating a metallic coating over the part. Eriksson teaches a process for plating a metallic coating to a surface in order to shield against EM radiation (col 1, ln 5-col 3, ln 25); and using a metallic coating applied by a tampon pad printing/coating method instead of a metallic film/plate (col 1, ln 5-col 3, ln

Art Unit: 1732

25)--as a note, Eriksson teaches that tampon pad printing/coating is more cost efficient than using a metallic film/plate. Eriksson also teaches applying/plating by sinking the detail into a fluid bath (abstract). JP407106784A and Eriksson are combinable because they are analogous with respect to shielding EM radiation. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the metallic plate of JP407106784A with a metallic coating formed by any of the plating processes of Eriksson in order to reduce manufacturing costs without sacrificing EM radiation shielding performance. In regard to providing an EM interference reflective layer, such is taught by the combination of JP407106784A and Eriksson.

3. Applicant's arguments filed 5/11/03 have been fully considered but they are not persuasive. Applicant argues that the applying processes of Eriksson are different from plating. This argument is confusing because the term "plating" with respect to metals simply means applying a metal coating onto a surface. The term "plating" is generic to any method of applying a metal coating. Thus, each of the applying processes taught by Eriksson falls within the scope of the generic term "plating."

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not


Art Unit: 1732

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H LEE whose telephone number is 703.305.4019. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD CRISPINO can be reached on 703.308.3853. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.7718 for regular communications and 703.305.3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

  
EDMUND H LEE 7/28/03  
Primary Examiner  
Art Unit 1732

EHL  
July 28, 2003